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NOTIFICATIONS BY GOVERNMENT

MUNICIPAL ADMINISTRATION AND WATER SUPPLY DEPARTMENT

THE TAMIL NADU PROHIBITION OF EMPLOYMENT AS MANUAL SCAVENGERS AND THEIR
REHABILITATION RULES, 2022

[G.O. Ms No.110, Municipal Administration and Water Supply (MA.2), 12th August 2022,
ஆடி 27, சுபகிருது, திருவள்ளூர் ஆண்டு-2053.]

No. SRO/A-14(a)/2022.

In exercise of the powers conferred by sub-sections (1) and (2) of section 36 read with sub-section (1) of Section 37 of the Prohibition of Employment as Manual Scavengers and their Rehabilitation Act, 2013 (Central Act 25 of 2013), the Governor of Tamil Nadu hereby makes the following Rules, namely :-

CHAPTER-I

GENERAL

1. Short title and commencement.— (1) These rules may be called the Tamil Nadu Prohibition of Employment as Manual Scavengers and their Rehabilitation Rules, 2022.

(2) It shall come into force on the 12th day of August 2022.

2. Definitions.— (1) In these rules, unless the context otherwise requires,-

(a) "**Act**" means the Prohibition of Employment as Manual Scavengers and their Rehabilitation Act, 2013 (Central Act 25 of 2013);

(b) "**Cleaning device**" includes but not limited to the equipments referred to in rule 5, whether manually or mechanically propelled which can be used to:-

(i) clean or enable the transport or flow of sewage in sewers or septage from septic tanks; and

(ii) avoid direct manual contact with such sewage or material.

(c) **"District Level Survey Committee"** means the Committee constituted under rule 16 of these rules.

(d) **"Enumerator"** means any person engaged by a local authority for the purpose of survey or verification of manual scavengers.

(e) **"Employer"** means an individual or a local authority or an agency or a contractor/agency who has engaged persons for cleaning, carrying, disposing of, or otherwise, the waste water/sewage in the machine holes or septic tanks or drainage;

(f) **"Executive Authority"** in relation to a Municipal Corporation or Municipality or Town Panchayat or Panchayat or any organisation, means its senior most executive officer, by whatever name called;

(g) **"Government"** means the State Government;

(h) **"Hazardous cleaning"** by an employee, in relation to a sewer or septic tank, means its manual cleaning by such employee without the employer fulfilling his obligations to provide protective gear and other cleaning devices and ensuring observance of safety precautions, as may be prescribed or provided in these rules or any other law, for the time being in force or rules made there under;

(i) **"Insanitary latrine"** means a latrine which requires human excreta to be cleaned or otherwise handled manually, either in *situ* or in an open drain or pit into which the excreta is discharged or flushed out, before the excreta fully decomposes in such manner as may be prescribed:

Provided that a water flush latrine in a railway passenger coach, when cleaned by an employee with the help of such devices and using such protective gear, as the Central Government may notify in this behalf, shall not be deemed to be an insanitary latrine;

(j) **"Inspector"** means a person appointed as Inspector by the Government under sub-section (1) of section 20 of the Act;

(k) **"Manual Scavenger"** means a person engaged or employed on or after the date of the commencement of the Act or at any time thereafter, by an individual or a local authority or an agency or a contractor, for manually cleaning, carrying, disposing of, or otherwise handling in any manner, human excreta in an insanitary latrine or in an open drain or pit into which the human excreta from the insanitary latrines is disposed of, or on a railway track or in such other spaces or premises, as the Central Government or a State Government may notify, before the excreta fully decomposes in such manner as may be prescribed, and the expression "manual scavenging" shall be construed accordingly.

Explanation.—For the purpose of this clause,—

(i) "engaged or employed" means being engaged or employed on a regular or contract basis;

(ii) a person engaged or employed to clean excreta with the help of such devices and using such protective gear, as the Central Government may notify in this behalf, shall not be deemed to be a "manual scavenger";

(l) **"Nodal Officer"** means an officer designated so under these rules;

(m) **"Overseer"** means an officer engaged by a local authority to exercise the powers and perform the duties under these rules.

(n) **"Protective Gear"** means personal safety gear and safety devices that are to be provided, worn or used by safai karamcharis or sanitary workers in respect of cleaning of sewers and septic tanks that may be necessary for the specific nature of work to be carried out, as including and not limited to the materials referred to in rule 4 to,-

(i) avoid any exposure of human skin to substances, which can lead to diseases, along with all breathing equipment which prevents inhalation of gases which can lead to diseases, and, also includes any sensory equipment for detection of gases present inside the sewers or septic tanks;

(ii) avoid any injuries while carrying out cleaning work;

(o) **"Safai Karamchari"** or "Sanitation Worker" means any person engaged in or employed for any sanitation work, other than domestic work;

(p) **"Safety Precautions"** shall include, but not be limited to, the precautions referred to in rule 7 and are all steps necessary to reduce the risk to the person and to avoid contraction of diseases and injuries by the person engaged in cleaning of sewers and septic tanks due to exposure to sewage or any other material in any physical state (solid, liquid or gas) inside the sewers or septic tanks and while entering sewers or septic tanks;

(q) **"Septic Tanks"** means a water-tight settling tank or chamber, normally located underground, which is used to receive and hold human excreta, allowing it to decompose through bacterial activity;

(r) "**Sewer**" means an underground conduit or pipe for carrying off human excreta, besides other waste matter and drainage wastes;

(s) "**State Level Survey Committee**" means the Committee constituted under rule 14 of these rules;

(t) "**Survey**" means a survey of manual scavengers undertaken in pursuance of section 11 or section 14 of the Act.

(2) The words and expressions used and not defined in these rules but defined in the Act, shall have the same meaning as assigned to them in the Act.

CHAPTER-II

OBLIGATIONS OF EMPLOYER TOWARDS EMPLOYEES ENGAGED IN THE CLEANING OF SEWER OR SEPTIC TANK

3. (1) No person shall be allowed to clean a sewer manually, without protective gear and safety devices under these rules, except:-

(a) for the removal of concrete or FRP (Fibre Reinforced Plastic) or damaged machine hole door where mechanical equipments cannot be put into operation;

(b) for inter-linking the newly laid sewer main with the existing sewer main, in case of sewer size of more than 300 mm diameter;

(c) for removal of submersible pump sets fixed at the bottom of the suction wells.

(d) for the reconstruction of the machine hole or rectification of the sewer main.

(e) Any circumstance, when it is absolutely necessary to have manual sewage cleaning, after the Executive Authority of the local authority has permitted to do so after recording in writing the specific valid reasons for allowing such cleaning.

(2) For the purposes of clauses (c) and (d) of sub-rule (1), before allowing entry of a person in the sewer, sewage shall be totally emptied.

4. **Protective gear and safety devices.**— Any person engaged to clean a sewer or a septic tank shall be provided by his employer, protective gear and safety devices including, but not limited to the following :-

- (i) Air compressor for blower
- (ii) Air line breathing apparatus
- (iii) Air line respirator with manually operated air blower
- (iv) Air purifier gas mask/chin cortege
- (v) Artificial respiration/Reticulate
- (vi) Barrier caution tape
- (vii) Barrier cream
- (viii) Barrier cone
- (ix) Blower
- (x) Breath mask
- (xi) Breathing apparatus
- (xii) Caution board
- (xiii) Chlorine mask
- (xiv) Emergency medical oxygen resuscitator Kit
- (xv) First aid box
- (xvi) Face mask
- (xvii) Gas monitor (4 gases)
- (xviii) Guide pipe set

- (xix) Full body wader suit
- (xx) Fishing wader suit attached with boots
- (xxi) Hand gloves
- (xxii) Head lamp
- (xxiii) Helmet
- (xxiv) Helmet demolishing
- (xxv) Lead acetate paper
- (xxvi) Life guard pad
- (xxvii) Modular airlines supply trolley system
- (xxviii) Normal face mask
- (xxix) Nylon rope ladder 5 metres
- (xxx) Nylon safety belt
- (xxxi) Pocket book
- (xxxii) Port oxy
- (xxxiii) Raincoat
- (xxxiv) Reflecting jacket
- (xxxv) Safety belt
- (xxxvi) Safety body clothing
- (xxxvii) Safety body harness
- (xxxviii) Safety goggles
- (xxxix) Safety gumboots
- (xl) Safety helmet
- (xli) Safety showers
- (xlii) Safety torch
- (xliii) Safety tripod set
- (xliv) Search light

5. Local authority to ensure cleaning devices to be used for cleaning sewer or septic tanks.— The local authority or officer designated shall ensure that the following cleaning devices are used by persons engaged in cleaning sewer or septic tank including but not limited to the following:-

- (i) Sewer Line Cleaning Bucketing Machine
- (ii) Jetting Machine
- (iii) Suction Machine (Gulley Emptier)
- (iv) Combined Machine (Jetting cum Suction)
- (v) Deep Suction Combined Machine (Jetting cum Suction Machine)
- (vi) Manual Hand Operated Grab Bucket
- (vii) Hydraulic Operated Trolley Mounted Grab Bucket
- (viii) Truck Mounted Motor & Winch Operated Grab Bucket Machine
- (ix) Fixed Structure Mounted Motor & Winch Operated Grab Bucket Machine
- (x) Rickshaw Mounted Winch & Motor Operated Desilting Machine for Wet well

- (xi) Rickshaw Mounted Winch & Auxilliary Engine Operated Desilting Machine for Machine hole
- (xii) Escort Hydra Crane Mounted Hydraulic Winch Operated Grab Bucket Desilting Machine
- (xiii) Manual rods, shovels, spades, drainage cleaning machines and steel scrapers with handles
- (xiv) Hoses and washing instruments

6.Safety precaution measures to be taken before cleaning.- (1) All protective gear and safety devices under these rules shall be checked every six months and necessary repair or replacements shall be made by the employer who engages a person for cleaning a sewer or a septic tank.

(2) Comfortable bodysuits shall be made available to the worker who has to enter the sewers/ septic tanks for their cleaning. The employer shall provide full body suits to workers entering machine holes of depth more than five feet and alternatively, partial fishing wader body suits to those entering machine holes of depth less than five feet.

(3) The employer or the contractor shall also ensure the following safety precautions before a person is engaged in the cleaning of a sewer or a septic tank, namely:-

(a) There shall be a minimum of three employees present all the time, one of whom shall be a supervisor;

(b) The atmosphere within the confined space shall be tested for oxygen deficiency and toxic and combustible gases including but not limited to poisonous gases like Hydrogen Sulphide, Carbon Monoxide, Methane and gasoline vapours, through detection tests including the following :-

- (i) lowering a detector lamp into the machine hole;
- (ii) inserting wet lead acetate paper which changes colour in the presence of hazardous gases;
- (iii) detection of gases through gas detector masks.

(c) Before starting the cleaning under sub-rule (1), the supervisor referred to in clause (a) of sub-rule (3) has inspected and determined if the sewer serves any industry nearby to anticipate any hazardous atmosphere that may be encountered.

(d) The condition of metal-rung ladders and the side walls of the machine hole shall be checked to see if there is any danger of collapse.

(e) Traffic and pedestrian barricades are provided all the times.

(f) A flag man should be stationed at least 50 feet ahead of a site and should be visible to incoming traffic for at least 500 feet.

(g) Regular medical check-up of sewage workers which shall include the examination of respiratory organs, skin injuries and other occupational diseases and injuries for their treatment to ensure that sewage workers afflicted with such diseases or injuries do not enter sewers for cleaning.

(h) Regular vaccination against respiratory and skin diseases and other occupational diseases to which these workers are prone due to exposure to harmful substances and gases in sewers.

(i) All employees who are present on-site during cleaning work are given training and adequately familiarised with the knowledge to operate all equipments involved in cleaning work, to avoid injuries or diseases associated with such work and to take necessary steps in case of emergency arising at the place of work and the training shall be conducted every two years and the employees shall be familiarized with any changes in method and technique with respect to the above.

(j) The supervisor possesses and keeps handy the names, addresses and telephone numbers of the nearest hospitals or clinics.

(k) Cleaning of a sewer or a septic tank shall be done :-

(i) only in day-light; and

(ii) for a duration not exceeding 90 minutes, at a stretch. There shall be a mandatory interval of 30 minutes between two stretches.

(l) Identify and close off or reroute any lines that might carry harmful substances to, or through, the work area.

(m) Ensure that written operating and rescue procedures are displayed at the entry site.

(n) If the entry is made through a top opening, use a housing device with a harness that suspends a person in an upright position and a mechanical device shall be available to retrieve personnel from vertical spaces more than five feet deep.

(o) At least one person trained in first aid and cardiopulmonary resuscitation should be immediately available during any confined space job.

(p) Oxygen content in the machine hole must be at least 19.5% in the confined space of the machine hole measures at all levels (bottom, middle and top) and no person enters the machine hole if oxygen level is below 19.5% and more than 21%.

(q) Ventilate the sewer line by opening at least two or three machine holes on both sides where work is to be carried out.

(r) Machine hole shall be opened at least one hour before the start of operation.

(s) The opened machine hole shall be properly fenced or barricaded to prevent any person, especially children, from accidentally falling into the sewer. Dummy cover with welded fabric or wire-net may be used.

(t) All workers must use the safety gear and safety devices before entering the sewer line.

(u) The person entering the machine hole or sewer line must be monitored using signal or camera or CCTV etc., throughout the operation period.

(v) Structural safety of machine hole rungs or steps must be tested before entering the machine hole.

(w) Portable aluminium ladder shall be available during the work period where necessary and the portable ladder shall be properly seated or fixed during use.

(x) No material or tools will be kept near the edge which can fall into the machine hole and injure the workman.

(y) Equipment used during sewer cleaning must be explosion and fire-proof.

(z) Smoking, open flames are prohibited inside the machine hole as well as in the immediate vicinity of open machine holes.

(za) In the event of a sudden or unpredictable atmospheric change, an emergency escape breathing apparatus with at least 10 minute air supply shall be worn.

7. Safety precautions measures at the time of cleaning.— The employer or contractor shall ensure the following safety precautions at the time when the person is engaged in the cleaning of a sewer or a septic tank:-

(a) Portable fans and air blowers with batteries, in good working condition with a backup capacity of more than the estimated duration of the entry of the person in the sewer, shall be carried into sewers for ventilation and a ventilation source shall be installed at the mouth of the machine hole.

(b) Flashlights and communication devices such as two-way radios shall be carried into sewers.

(c) Presence of the following rescue equipments at the site: -

(i) A tripod and harness system or some other method to lift an injured worker to the surface with skill and care.

(ii) A basket stretcher or similar device shall be available for moving the injured worker to emergency transportation.

(iii) First aid equipments as given in **Annexure-I** and trained personnel shall be immediately available.

(d) The employer or contractor shall ensure availability of ambulance and other follow-up in close proximity to facilitate immediate treatment.

(e) The employer or contractor shall ensure that the assigned person has life insurance policy of at least ten lakh rupees and the premium for which shall be paid by the employer or contractor as the case may be.

8. Post-cleaning safety precautions.— The employer or contractor shall ensure the following post-cleaning safety precautions after a person engaged in the cleaning of a sewer or a septic tank comes out of the machine hole or septic tank after a session of cleaning:-

(a) Provide facilities for removal of contaminated clothing and for wash-up as well as cleaning, dry clothing.

(b) Wash-up material shall include but not be limited to water, soaps, hand sanitizers and adequate and medically authenticated skin cream for applying on the body for post cleaning safety.

(c) Any cuts/bruises on the skin or problems with a respiratory organ suffered on account of cleaning of sewer shall be immediately cured.

CHAPTER-III

SURVEY OF INSANITARY LATRINES AND MANUAL SCAVENGERS

9. Survey of Insanitary Latrines.— (1) Every local authority shall draw a suitable time schedule for carrying out survey of insanitary latrines within its jurisdiction and the publication of their list.

(2) The local authority shall take the assistance of the community leaders and Non Governmental Organizations working in the area for the welfare of the Safai Karamcharis or sanitary workers, on the existence of insanitary latrines in the area under its jurisdiction.

(3) Any complaint filed by any person including a Non Governmental Organization, regarding the construction, maintenance or use of insanitary latrine, shall be inquired by the local authority within fifteen days of filing the complaint.

(4) The local authority shall constitute a Committee under its Executive Authority with at least two members from the community of Safai Karamcharis or sanitary workers, one of whom shall be a woman and at least one member from the civil society groups.

(5) The Committee referred to in sub-rule (4) shall plan and monitor the survey and ensure that an awareness campaign is carried out simultaneously with the survey that is conducted.

(6) The Executive Authority of the local authority shall prepare an initial list of insanitary latrines existing in his jurisdiction and display the same at the notice board of the office of the local authority and publish in two local daily newspapers, inviting the objections, specifying the date by which the objections, if any, to the list, shall be received.

(7) The local authority shall cause to hold a meeting on the due date as specified to hear the complaints and objections received on the initial list and approve the final list of insanitary latrines.

(8) The final list of insanitary latrines shall be prepared and published by the local authority which shall display the same at the notice board of office of the local authority and publish in two local newspapers, one of which shall be in the vernacular language.

(9) The local authority, within fifteen days of final publication of list of insanitary latrines, shall serve a notice on the occupier of the insanitary latrine to either demolish such insanitary latrine or convert it into a sanitary latrine within a period of six months.

(10) A copy of such notice referred to in sub-rule (9) shall be sent to the Inspector.

(11) The notice referred to in sub-rule (9) shall include information regarding the schemes of the Central and State Governments which entitle the beneficiaries to incentives for the demolition of insanitary latrines or conversion to sanitary latrines; and other information regarding the eligibility to avail the benefits under those Schemes and the procedure for availing such benefits.

(12) The Committee referred to in sub-rule (4) shall submit the survey report to the District Magistrate, who, or any department designated by him for this purpose, in turn, shall submit the consolidated reports of all local authorities under his jurisdiction to State Level Survey Committee.

(13) State Level Survey Committee shall furnish the report of the survey to the Central Ministry/Department dealing with the Schemes of conversion of insanitary latrines into sanitary latrines for the urban and rural areas.

(14) The eligible beneficiaries under the relevant Schemes of the Central Government or State Government may apply for the admissible financial assistance under such schemes.

(15) After the expiry of the period under sub-rule (9), the local authority shall have the premises of the occupier of insanitary latrine inspected.

(16) If the occupier has neither demolished nor converted the insanitary latrine into a sanitary latrine, the local authority shall order for its demolition and recover the cost from the occupier as arrears of land revenue.

10. Survey of Manual Scavengers.— (1) If any local authority has reason to believe that some persons are engaged or employed in manual scavenging within its jurisdiction, the Executive Authority of such local authority shall cause a survey to be undertaken to identify such persons. The local authority shall ensure that the persons conducting the survey of manual scavengers shall be adequately and appropriately trained by the local authority on the method and manner in which the survey shall be conducted and sensitized on the issue of manual scavenging.

(2) The State Level Survey Committee and the District Level Survey Committee shall carry out adequate campaigns at various levels especially in all such areas where insanitary latrines have been found during the survey of insanitary latrines.

(3) The local authority shall also associate community leaders or Non Governmental Organizations working for the welfare of Safai Karamcharis or sanitary workers in identification of manual scavengers.

(4) The local authority shall invite manual scavengers through awareness campaigns to declare themselves at the self declaration centres and have their details verified during a period and at places, which shall be notified by the local authority.

(5) The lists of manual scavengers, if provided by the Non Governmental Organisations or any other person or agency, shall be fully verified to identify manual scavengers.

(6) In case, there is discrepancy between the data of insanitary latrines or the number of manual scavengers thrown up by any person or organisation, the local authority shall order a house-to-house survey of insanitary latrines by the enumerators to know the names of manual scavengers servicing those insanitary latrines.

(7) The local authority shall also make efforts to identify manual scavengers by visiting the habitations of concentration of safai karamcharis, sanitary workers or manual scavengers.

(8) Sample checks of the work done by the enumerators would be carried out by overseers designated for the purpose by the local authority, on the basis of random selection to the extent indicated below :-

(i) 100% check in villages.

(ii) 100% check in cities and towns having less than 1000 households with insanitary latrines.

(iii) 50% of the declarations, verified by each enumerator, shall be checked in towns or cities having 1000 to 9999 households with insanitary latrines.

(iv) 33% of the declarations, verified by each enumerator, shall be checked in towns/cities having 10000 or more households with insanitary latrines.

(v) in categories (iii) and (iv), if sample check of the work done by any enumerator reveals an error of >10%, a 100% check of his work shall be carried out by the supervisor.

(9) Any person having objection either to the inclusion or exclusion of any name in the provisional list of manual scavengers in pursuance of the Act, may within a period of fifteen days from the provisional publication, file an objection in the prescribed format specified by the concerned local authority.

(10) The local authority shall also notify the manner of publication of said list during the survey of manual scavengers carried out under the Act.

(11) The local authority shall get the objections enquired into and hold a meeting, if necessary to finalise the list of manual scavengers in its jurisdiction.

(12) After publication of the final list by the local authority, no claim or objection on the list shall be accepted for being included or excluded in the list, provided that the manual scavenger shall be entitled to give self-declaration about his being a manual scavenger.

(13) The District Collector shall notify a designated officer not below the rank of Tahsildar or Block Development Officer for inquiring into claims and objections received and giving their findings and the inquiry conducted by the designated authority shall ensure that: -

(i) the claimant or objector is given adequate opportunity to be heard;

(ii) the claimant or objector is given not less than seven days notice about the date of summary hearing as provided under sub-rule (15);

(iii) the claimant or objector shall be allowed to support his claim with documentary evidence, if any, as provided under sub-rule (14);

(iv) the claimant or objector shall have the right to be represented by a lawyer, Non Governmental Organization, or a friend; and

(v) the claimant or objector shall be given a copy of the order passed by the designated authority as provided under sub-rule (20).

(14) Forms for filing claims and objections under these Rules shall be made available to the applicants free of charge on demand at the designated place, as also through the website of the local authority and the claimant or objector may support his claim with documentary evidence, if any.

(15) Summary hearings shall be conducted by officers designated by the local authority.

(16) The officer designated to verify the claims may order fresh verification, if necessary.

(17) After summary hearing and such further verification (if ordered), the officer would pass an appropriate order, accepting or rejecting the claim or objection, as the case may be and a copy of the order would be given to the persons concerned.

(18) After settlement of claims and objections by the designated authority, the local authority shall carry out necessary corrections in the draft list and transmit it to the District Level Survey Committee for its consideration.

(19) The District Level Survey Committee shall cause compilation of lists of manual scavengers received from each local authority, town and prepare a list of manual scavengers for the district which the District Collector will forward to the Government.

(20) The Government shall have the lists of manual scavengers received from various districts, compiled and prepare a consolidated State list of manual scavengers.

(21) Any person working as a manual scavenger, may self-declare either during the survey undertaken by the local authority, or any time thereafter, apply to the Executive Authority of the local authority, or to any other officer authorised by him in this behalf, for being identified as a manual scavenger in the prescribed Proforma. Format of the application is given at **Annexure-II**.

(22) There shall be no minimum age limit for identification of manual scavenger and there shall be no restriction regarding the caste or religion or income or gender for being identified as manual scavenger.

(23) For the purposes of sub-rule (22), a person should have been engaged or employed as manual scavenger at the commencement of the Act or thereafter and should have worked as such continuously for not less than three months.

(24) A provisional list of identified manual scavengers as verified by the overseers, shall be published by the concerned local authority in local newspapers and displayed in its own office and at such other places as deemed appropriate.

(25) A copy of the provisional list shall be made available to members of the local authority and the Non Governmental Organizations or community leader of Safai Karamcharis or sanitary workers.

(26) While publishing the provisional list, the local authority shall call upon members of the public to file claims and objections vis-a-vis the list, within a period of not less than fifteen days, in a proforma notified by the local authority.

(27) After the approval of the final list by the District Level Survey Committee, it shall be duly published at the notice boards of concerned offices and the final list shall also be uploaded on the website of the District administration and the Government.

11. Financial Assistance to manual scavengers.—The identified manual scavengers, one from each family, shall be eligible for receiving one time cash assistance of Rs.40,000/- (Rupees forty thousand only) immediately after identification.

CHAPTER-IV

POWERS OF THE INSPECTOR AND NODAL OFFICER

12. Inspector.- (1) If an Inspector has reason to believe that an offence under section 5 or sub-section (2) of section 6 or section 7 of the Act has, or is, or is likely to take place, he shall conduct inspection, investigation or enquiry.

(2) If the offence pertains to the construction, maintenance or use of an insanitary latrine, the Inspector shall report to the local authority, which shall thereafter take action as per the provisions of the Act.

(3) If the offence pertains to the employment of manual scavengers, the Inspector shall send a report to the local authority as well as the District Magistrate.

(4) The local authority shall take steps to include the name of a manual scavenger found to be employed in the final list of manual scavengers, whether during survey or any time thereafter, and once the name of a manual scavenger is added to the final list, the manual scavenger shall be rehabilitated under the provisions of the Act.

(5) If it appears to the Inspector that hazardous cleaning of sewer or septic tanks is being resorted to, the Inspector shall order to stop such hazardous cleaning forthwith and shall report the matter to the local authority.

(6) The Inspector may examine any structure, site, place or premises within his jurisdiction, when there are reasons to believe that any such premises is being used or has been used or about to be used for hazardous cleaning of sewer or septic tank.

(7) The Inspector may take on the spot or otherwise such evidence of any person which he may consider necessary for the purpose of any examination or enquiry connected with insanitary latrines or hazardous cleaning of sewer or septic tank:

Provided that such person shall not be compelled to answer any question or give any such evidence tending to incriminate him.

(8) The Inspector may take or caused to be taken any photograph, video clip, sample, record or make any sketch by using any device including electronic device as he may consider necessary for the purpose of any examination or enquiry under these rules.

(9) On finding that a local authority, person or agency is engaging in or employing a person in hazardous cleaning, the Inspector shall instruct such authority, person or agency to stop such undertaking of cleaning immediately and shall serve a notice in a form annexed as **Annexure-III** to these rules.

13. Nodal Officer.— (1) The Commissioners of the respective Municipal Corporations, the Commissioners or executive authorities of respective Municipalities and Town Panchayats and the Assistant Director of Panchayats of the District in respect of the Panchayats concerned shall be designated as the Nodal Officers.

(2) The Nodal Officers shall report the details of sewer or septic tank deaths, compensation paid etc., in their respective jurisdiction to the District Vigilance Committee on or before 7th day of every month in the form given in **Annexure IV** to these rules.

CHAPTER-V

CONSTITUTION OF STATE LEVEL SURVEY COMMITTEE AND DISTRICT LEVEL SURVEY COMMITTEES AND ITS FUNCTIONS

14. Constitution of State Level Survey Committee.— There shall be a State Level Survey Committee for the State with the following Composition:-

1.	Additional Chief Secretary to Government, Municipal Administration & Water Supply Department	:	Chairman
2.	Commissioner of Municipal Administration	:	Member Secretary
3.	Director, Adi Dravidar Department	:	Member
4.	Director, Tribal Welfare Department	:	Member
5.	Director, Economics & Statistics	:	Member
6.	Commissioner of Rural Development & Panchayat Raj	:	Member
7.	Director of Census Operations	:	Member
8.	One Representative of Railway authority	:	Member
9.	Two Representatives of NGOs working for Welfare of Manual Scavengers and Safai Karamcharis to be nominated by the Commissioner of Municipal Administration.	:	Members
10.	Two Community Representatives of whom one should be woman to be nominated by the Commissioner of Municipal Administration.	:	Members

15. Functions of the State Level Survey Committee.- (1) The functions of the State Level Survey Committee shall be -

- (a) to monitor and oversee the survey process at state level;
- (b) to distribute the materials for awareness campaign to designated place;
- (c) to arrange publicity through local newspapers etc. about the survey;
- (d) to distribute translated survey material to designated place under its jurisdiction;
- (e) to approve final list of manual scavengers for all towns, cities and villages in the state; and
- (f) to publish final consolidated list of the manual scavengers in the state;

(2) The Committee shall meet as and when required.

16. Constitution of District level survey committee.— There shall be a District Level Survey Committee for each District with the following composition:-

1.	District Collector/District Magistrate	:	Chairman
2.	District Adi Dravidar Welfare Officer	:	Member Secretary
3.	Assistant Director of Town Panchayats	:	Member
4.	Assistant Director of Village Panchayats	:	Member
5.	District Level Statistical Officer	:	Member
6.	Commissioners of Municipal Corporations / Municipalities	:	Members
7.	One Representative of Railway authority	:	Member
8.	Two Representatives of NGOs working for Welfare of Manual scavengers and Safai Karamcharis to be nominated by the District Collector.	:	Members
9.	Two Community Representatives of whom one should be woman to be nominated by the District Collector.	:	Members

17. Functions of the District Level Survey Committee.— (1) The functions of the District Level Survey Committee shall be-

- (a) to monitor and oversee the survey process at District level;
- (b) to distribute the materials for awareness campaign to designated place;
- (c) to arrange publicity through local newspapers etc. about the survey;
- (d) to distribute translated survey material to designated place under its jurisdiction;
- (e) to approve final list of manual scavengers for all towns, cities and villages in the district; and
- (f) to publish final consolidated list of the manual scavengers in the district.

(2) The Committee shall meet as and when required.

CHAPTER-VI

STATE LEVEL MONITORING COMMITTEE AND DISTRICT VIGILANCE COMMITTEES

18. Procedure for conduct of meetings of the State Monitoring Committee.— The State Monitoring Committee constituted under sub-section (1) of section 26 of the Act shall observe the following procedure in regard to the transaction of business at its meetings:-

(1) The State Monitoring Committee shall meet at least once in six months on such dates and times as may be appointed by the Chairperson.

(2) The meeting shall normally be held at the State headquarters.

(3) Where the Committee finds it necessary to hold the meeting at any other place, for the reasons to be recorded in writing, such meetings may be held at other places, within the State.

(4) The Member-Secretary shall cause a notice of minimum ten days issued to all the members of the Committee and also send the list of business to be considered during the meeting.

(5) No business, which is not included in the list of business, shall be considered, without the permission of the Chairperson.

(6) The Chairperson shall preside over each meeting at which he is present, and in his absence, members may elect the senior-most member present to be Chairperson to preside over the meeting.

(7) No business shall be transacted at a meeting unless at least one third of the total members of the Committee are present:

Provided that if at any meeting, less than one third of the members are present, the Chairperson may adjourn the meeting to a date not less than seven days from the date of the meeting, informing the members present and sending registered notice to the other members.

(8) The business at the adjourned meeting shall be disposed of in the next meeting irrespective of the quorum.

(9) The proceedings of each meeting shall be circulated to all members present and shall be read out and confirmed at the next meeting of the Committee, and shall be signed by the Chairperson.

(10) The minutes shall be recorded in a minute book which shall be kept as a permanent record.

(11) A copy of the minutes shall be endorsed to the Central Government through the Government for the information of the Central Monitoring Committee.

19. Procedure for conducting meetings of the District Vigilance Committees.— The Procedure for conduct of meeting by the District Vigilance Committees constituted in each district under section 24 of the Act shall be as follows:-

(1) The District Vigilance Committee shall meet atleast once in three months on such dates and times as may be appointed by the Chairperson.

(2) The meeting shall normally be held at the District headquarters.

(3) Where the Committee finds it necessary to hold the meeting at any other place, for the reasons to be recorded in writing, such meetings may be held at other places, within the District.

(4) The Member-Secretary shall cause a notice of minimum seven days issued to all the members of the Committee and also send the list of business to be considered during the meeting.

(5) No business, which is not included in the list of business, shall be considered, without the permission of the Chairperson.

(6) The Chairperson shall preside over each meeting at which he is present, and in his absence, members may elect the senior-most member present to be Chairperson to preside over the meeting.

(7) No business shall be transacted at a meeting unless at least one third of the total members of the Committee are present:

Provided that if at any meeting, less than one third of the members are present, the Chairman may adjourn the meeting to a date not less than five days from the date of the meeting, informing the members present and sending registered notice to the other members.

(8) The business at the adjourned meeting shall be disposed of in the next meeting irrespective of the quorum.

(9) The proceedings of each meeting shall be circulated to all members present and shall be read out and confirmed at the next meeting of the Committee, and shall be signed by the Chairperson.

(10) The minutes shall be recorded in a minute book which shall be kept as a permanent record.

(11) A copy of the minutes shall be endorsed to the State Government for the information of the State Monitoring Committee.

20. Procedure for conducting meetings of the Sub Divisional Vigilance Committees.- The Procedure for conduct of meeting by the Vigilance Committee constituted in each sub division under section 24 of the Act shall be as follows:-

(1) The Sub Divisional Vigilance Committee shall meet atleast once in three months on such dates and times as may be appointed by the Chairperson.

(2) The meeting shall normally be held at the headquarters of the revenue sub division.

(3) Where the Committee finds it necessary to hold the meeting at any other place, for the reasons to be recorded in writing, such meetings may be held at other places, within the revenue sub division.

(4) The Member-Secretary shall cause a notice of minimum seven days issued to all the members of the Committee and also send the list of business to be considered during the meeting.

(5) No business, which is not included in the list of business, shall be considered, without the permission of the Chairperson.

(6) The Chairperson shall preside over each meeting at which he is present, and in his absence, members may elect the senior-most member present to be Chairperson to preside over the meeting.

(7) No business shall be transacted at a meeting unless atleast one third of the total members of the Committee are present:

Provided that if at any meeting, less than one third of the members are present, the Chairperson may adjourn the meeting to a date not less than three days from the date of the meeting, informing the members present and sending registered notice to the other members.

(8) The business in the adjourned meeting shall be disposed of in the next meeting irrespective of the quorum.

(9) The proceedings of each meeting shall be circulated to all members present and shall be read out and confirmed at the next meeting of the Committee, and shall be signed by the Chairperson.

(10) The minutes shall be recorded in a minute book which shall be kept as a permanent record.

(11) A copy of the minutes shall be endorsed to the District Vigilance Committee for the information of the Government.

CHAPTER-VII

REHABILITATION OF IDENTIFIED MANUAL SCAVENGERS

21. Rehabilitation.— Any person included in the final list of manual scavengers published under sub-section (6) of section 11 or sub-section (3) of section 12 or section 14 or sub-section (2) of section 15 of the Act shall be rehabilitated as required under section 13 of the Act, in the following manner, namely:-

(1) All persons identified and listed through survey as manual scavengers shall be rehabilitated with one time cash assistance of Rs.40,000/- (Rupees forty thousand only) one from each family, immediately after identification, as per rule 11 of these rules.

(2) The members of the scavenging community shall be given preference in the award of contracts for maintaining the public toilets, urinals and bathrooms in railways stations, bus stands, markets and so on. They shall be engaged as waste collectors through outsourcing for door to door collection with segregation of solid waste in local bodies.

(3) Any member of the scavenging community, who intend to launch his own business / economic activity, shall be provided with adequate financial assistance under various Government schemes and through bank loans.

(4) The children of the manual scavenger shall be entitled to scholarship as per relevant scheme of Central Government or the State Government or the local authorities, as the case may be.

(5) The listed persons through the survey shall be allotted a residential plot and financial assistance for house construction, or a ready built house with financial assistance, subject to eligibility and willingness of the manual scavengers as per the provisions of the relevant scheme.

(6) At least one member of their family shall be given subject to eligibility and willingness, training in livelihood skill and shall be paid a monthly stipend during such period.

(7) At least one adult member of their family shall be given, subject to eligibility and willingness, subsidy and concessional loan for taking up an alternative occupation on sustainable basis as per the provisions of the relevant scheme.

CHAPTER-VIII

USAGE OF TECHNOLOGICAL APPLIANCES FOR CLEANING OF SEWER, MACHINE HOLES AND SEPTIC TANKS

22. Usage of Technological Appliances.— Every local authority and other agency shall use appropriate technological appliances for cleaning of sewers, machine holes, septic tanks and other spaces within their control with a view to eliminating the need for the manual handling of excreta in the process of their cleaning as required under section 33 of the Act. The procedure, which shall be adopted for such usage of technological appliances is given in **Annexure V** to these Rules.

ANNEXURE I

(See rule 7)

First Aid Facilities.—At every work place, there shall be provided and maintained, so as to be easily accessible during working hours, not less than one first-aid box.

(1) The first-aid box shall be distinctly marked with a red cross on white back ground and shall contain the following equipments, namely :-

(a) For work places in which the number of employees employed does not exceed 50, each first-aid box shall contain the following equipments:-

(i) 6 small sterilised dressings.

(ii) 3 medium size sterilised dressings

(iii) 3 large size sterilised dressings

(iv) 3 large sterilised burn dressings

(v) 1 (30 ml.) bottle containing a two percent alcoholic solution iodine

(vi) (30 ml.) bottle containing sal-volatile having the dose and mode of administration indicated on the label

(vii) 1 snakebite lancet

(viii) 1 (30 gms.) bottle of potassium permanganate crystals

(ix) 1 pair of scissors

(x) 1 copy of the first-aid leaflet issued by the Director General, Factory Advice Service and Labour Institutes, Government of India

(xi) 1 bottle containing 100 tablets (each of 5 gms.) of aspirin

(xii) Ointment for burns

(xiii) A bottle of suitable surgical antiseptic solution

(b) For Work places in which the number of employees exceeds 50, each first-aid box shall contain the following equipments :-

(i) 12 small sterilised dressings.

(ii) 6 medium size sterilised dressings.

(iii) 6 large size sterilised dressings.

(iv) 6 large size sterilised burn dressings.

(v) 6 packets sterilised cotton wool.

(vi) 1 (60 ml.) bottle containing two percent alcoholic solution iodine.

(vii) 1 (60 ml.) bottle containing salvolatile having the dose and mode of administration indicated on the label.

(viii) 1 roll of adhesive plaster.

(ix) 1 snake bite lancet.

(x) 1(30 gms.) bottle of potassium permanganate crystals.

(xi) 1 pair of scissors.

(xii) 1 copy of the first-aid leaflet issued by the Director General Factory Advice Service and Labour Institutes/Government of India

(xiii) A bottle containing 100 tablets (each of 5 gms.) of aspirin.

(xiv) Ointment for burns.

(xv) A bottle of suitable surgical antiseptic solution.

(2) Adequate arrangements shall be made for immediate recoupment of the equipment, when necessary.

(3) The first-aid box shall be kept in charge of a responsible person who shall always be readily available during the working hours of the work place.

(4) A person in charge of the First-aid box shall be a person trained in first-aid treatment, in the work places where the number of employees employed is 150 or more.

(5) In work places where the number of employees employed is 500 or more and hospital facilities are not available within easy distance from the work place, first-aid posts shall be established and run by a trained compounder and he shall be on duty and shall be available at all hours when the workers are at work.

(6) Where work places are situated in places which are not towns or cities, a suitable motor transport shall be kept readily available to carry injured person or person suddenly taken ill, to the nearest hospital.

(7) The first-aid box shall not contain any other equipment or substance as mentioned above.

ANNEXURE-II

[See rule 10(21)]

Self Declaration Form**Identification of the persons engaged in manual scavenging**

(Office use)

- Name of the State :
- District :
- Corporation : _____ Municipality : _____
- Town : _____ Ward : _____
- Panchayat _____ Village _____

Photo of the
person
engaged in
manual
scavenging

Family Photo of the person engaged in manual scavenging
(Picture post card size photograph 6" x 4")

1. Name of the person engaged in manual scavenging : _____

2. Name of Father / Mother / Spouse : _____

3. Age : _____

4. Sex : Male Female

5. Educational Status : (Put a \checkmark mark in the appropriate box)

(i) (a) Literate (b) Not literate

(ii) If Literate, level of education :-

Studied: Class 1-5: Class 6-10: Class 11-12: Class above 12:

6. Occupation :

(i) Carrying / disposing / cleaning of human excreta manually from insanitary latrine

(ii) Cleaning untreated human excreta manually from :

(a) open drain (b) Railway Track (c) Pit Latrine

7. Status of Employment :

I. Employed in :

(a) Private :-

(i) Individual Household (ii) Community/ Group of Households (iii) Contractor (iv) Institution like hospital, office etc.

(v) Others (specify) _____

(b) Central Government (c) State Government (d) Local authority

II. Employed on :

(a) Permanent basis (b) Temporary basis (c) Contract basis (d) Jajmani

8. How long you have been in this Occupation : _____

9. Social Background :

(a) Whether SC/ST/MBCs/BCS/Others (b) Caste (c) Sub Caste (d) Religion

10. (a) Have you received any benefit from the Government rehabilitation schemes?

(Put a \checkmark mark in the appropriate box)

Yes	No
-----	----

(b) If yes, name of the scheme (Put a \checkmark mark in the appropriate box) :

	Name of the Schemes	Rupees
(1)	National Scheme for Liberation and Rehabilitation of Scavengers (NSLRS)	
(2)	Self Employment Scheme for Rehabilitation for Manual Scavengers (SRMS)	
(3)	Any other (Please specify the name of Scheme(s))	

(c) If yes, whether project funded through above scheme is running

Yes	No	If yes, monthly income (Rs.)

(d) Not known

11. (a) Are you engaged in any occupation other than scavenging? : Yes No

(b) If yes, specify : _____

12. Any other skills you possess :

(i) Construction (ii) Carpentry

(iii) Driving (iv) Cooking

(v) Tailoring (vi) Any other (specify) _____

13. Alternative Occupation Proposed (Please specify) : _____

Name and Address of the person engaged in manual scavenging: -----

Pincode -----

Contact Telephone/ Mobile No.

Signature of Data Entry Operator -----

Signature/ Thumb Impression of the person engaged in manual scavenging -----

Name and date (with code No.): -----

Name and date: -----

Signature of Enumerator -----

Signature of supervisor -----

Name and date: (with code No.):

Name and date (with code No.): -----

Details of Insanitary Latrine**1. Details of Individual Insanitary Latrine (IIL) :**

Sl.No.	Name of the owner of Insanitary Latrine	Location		Monthly Salary/ wages of the Manual Scavenger (Rs.)	
		Dry latrine	Latrine from which excreta is being flushed into open drain	In cash	In food grains etc.

Total Number of the Individual Insanitary Latrines being cleaned by the person engaged in manual scavenging :

(Note: Please give detailed description of the Individual Insanitary Latrine cleaned by the person engaged in manual scavenging. In case you need to write extra information kindly photocopy this page and attach with the survey form)

2. Details of Community Insanitary Latrine (CIL) :

Sl. No.	Name of the owner (Organisation/ Agency) of Community Insanitary Latrine	Location		Monthly Salary/ wages of the Manual Scavenger (Rs.)	
		Dry latrine	Latrine from which excreta is being flushed into open drain	In cash	In food grains etc.

3. Detail of Open Drains(OD)/Railway Tracks/Other Spaces :

Sl. No.	Location of Open Drains/Railway Tracks/Other Spaces in which excreta from the insanitary latrines is being flushed	Salary/wages of the manual scavengers	
		In cash (Rs.)	In kind (Rs.)

(Note: If the number of involved manual scavengers in OD is more than one, then please fill up a separate form for each of the persons engaged in manual scavenging)

ANNEXURE-III

(See rule 12(9))

<p>-----</p> <p>-----</p> <p>Office of the Inspector</p> <p>_____ (Area name) Date: --/--/--</p>

Notice

[Under rule 12(9) of the Prohibition of Employment as Manual Scavengers and their Rehabilitation Rules, 2022]

Ref.....date.....

To

Subject : Notice under the Prohibition of Employment as Manual Scavengers and their Rehabilitation Act, 2013 (here in after the Act) and the Prohibition of Employment as Manual Scavengers and their Rehabilitation Rules, 2022 (hereinafter the Rules) : Hazardous cleaning of sewers and septic tanks

WHEREAS, section 7 of the Act provides that no person, Local Authority or any agency shall, from such date as the State Government may notify, which shall not be later than one year from the date of commencement of the Act, engage or employ, either directly or indirectly, any person for hazardous cleaning of a sewer or a septic tank;

AND

WHEREAS, the Government has notified the date of the enforcement of the provisions of section 7 of the Act as the 15th day of March, 2015;

AND

WHEREAS, cleaning of sewers and septic tanks is regulated under the provisions of rules 3 to 8 of the Rules;

AND

WHEREAS, you have been noticed to have violated the provisions of section 7 read with Section 2(1)(d) of the said Act and rule 3(1) of the rules as detailed below:-

(i) Place of violation:- _____

(ii) Date of violation:- _____

(iii) Violation details :- _____

2. You are requested to show cause as to why action against you under section _____ of the Act be not initiated. You are requested to submit your clarification in writing by _____(date) or appear in person in my office on _____ at _____.

3. In case of failure to submit the necessary clarification by you or your failure for appearance or your representative fails to appear on the specified day and time, it shall be deemed that you have nothing to say in the matter and the undersigned shall be free to take action in accordance with the provisions of the Act and the Rules.

Name and Designation of the Inspector

Date:- _____

Place:- _____

ANNEXURE-IV

(See rule 13(2))

FORMAT FOR SEWER DEATH CASES AND PAYMENT OF COMPENSATION

Sl. No.	Name of the victim	Date of death	Name of the spot & District where death has occurred	Name of next of kin who has been paid compensation	Mode of payment	Amount of payment

ANNEXURE V

(see rule 22)

(1) Mechanized Cleaning.— Employment of any person for manual scavenging or hazardous cleaning of sewers and septic tanks is completely banned under the Act. Manual cleaning of sewers and septic tanks with safety precautions including protective gear and devices can be undertaken under exceptional cases only, with the permission of the local authority for reasons to be recorded.

(a) Each local body and private sanitation agencies shall be equipped with appropriate technology, machineries, etc. (mechanised solution) and ensure that only trained professionals are allowed to enter the sewer / septic tanks.

(b) Mechanical cleaning of sewers is the most preferred method and shall be employed to the extent possible. To operate and maintain a sewer collection system to function as intended, the maintenance engineer should try to strive towards the objectives to minimize the number of blockages per unit length of sewer, and to minimize the number of odour complaints. For this purpose, sewer cleaning using hydraulic or mechanical cleaning methods needs to be done on a scheduled basis to remove accumulated debris in the pipe such as sand, silt, grease, roots and rocks.

(2) Cleaning frequency.— The frequency of cleaning of sewers is based on the prevailing local conditions and determined through field inspections and complaints received from the residents of the area. However, it is desirable to clean the sewer at least once in every six months (ideally once just before monsoon season). Inspections and examinations of the sewers and septic tanks shall be made before to start the cleaning.

(3) Procedures for cleaning of sewers - Mechanical:**Step 1 : Reaching the site**

- Selection of prospective employees for the sewer cleaning should take into account the duties they will be expected to perform.
- The complete hazard involved in the cleaning activity should be explained clearly to the employees by the supervisor and should get their written consent before starting cleaning activities.
- A Supervisor along with adequate machinery and staff shall reach the designated site, preferably during lean period of sewage flow in sewers.
- The Supervisor shall have the names , address and emergency contact information of the staff involved in cleaning the sewers.
- Appropriate protective gears and safety devices shall be worn by the staff before beginning the work of cleaning the sewers.

Step 2 : Identification and Isolation of the area

- Identify the stretch to be cleaned and identify the machine holes associated with the stretch.
- Barricade the area where cleaning is to be carried out.
- A Flag man shall be stationed at least 15m ahead of the site and should be visible to incoming traffic for at least 150m.
- Cones (similar to the one used by Police) shall be placed on the road.

Step 3 : Verify the presence of any gases or other hindrances

- (a) Ventilate the sewer line by opening 2-3 machine holes on both sides of the working stretch for at least 1 hour prior to start of the work to ensure escape of toxic gases. The worker opening the machine hole must not bend down into opened machine hole and this may cause his getting overcome by hydrogen sulphide gas and even tripping into the machine hole.
- (b) Use gas monitor, detector lamp, wet acetate paper or gas detector masks to detect any residues of poisonous gases like hydrogen sulphide, carbon monoxide, methane and gasoline vapours.
- (c) Insert a long pole with lead acetate paper which will convert to black colour in the presence of hydrogen sulphide. The person shall not try to insert the paper by hand into the machine hole.
- (d) If gases are detected, extend waiting period to allow residual gases to escape and to avoid the chance of explosion, in case. Repeat the procedure many times for checking the escape of toxic gases.
- (e) Before the start of the cleaning operation, employees shall check for hindrances that may delay the cleaning process.
- (f) Dummy covers with welded fabric or wire net shall be used to cover the machinehole, if required. However care should be taken to ensure that the cover is strong enough to hold a man's weight.

Step 4 : Removal of silt / wax – Mechanical Process

- (a) Appropriate machines, at least to the extent specified in these Rules or guidelines, standard operating procedures prescribed by appropriate authority are to be used to remove the silt / wax.
- (b) The operating procedures of these machines shall be strictly followed for cleaning.
- (c) The machine hole cover shall be closed tightly after cleaning.

Step 5 : Leaving from the site

- (a) All the equipments / machineries along with the protective gears and safety devices that had any direct contact with the sewage shall be cleaned properly as per the cleaning procedure specified by the manufacturer.
- (b) All the equipments, safety gears, barricades etc. shall be removed from the working area and the crew shall move to the base or to the next site.

The entire operation shall be monitored and documented by the Supervisor.

(4) Emptying of septic tanks:**(a) Emptying Frequency:**

Regular emptying of septic tanks through a systematic extraction and collection procedure is essential to check environmental pollution. The frequency of emptying shall be determined by the local conditions including loading rate and performance of septic tanks. However, it is ideal to clean the septic tanks once in one year or two years based on its design criteria. But in no case, the cleaning frequency shall exceed two years.

(b) Procedures followed for Emptying of Septic Tanks:

- (i) Inform the occupant, of the pending service and note any concerns or issues.
- (ii) Inspect the site for possible hazards, such as clearing the area, of people or identifying high ground water that could cause a tank to "float", if emptied.
- (iii) Park the truck as close to the septic tank as possible. The maximum distance is determined by the length of hose and elevation rise from the bottom of the pit or septic tank to the vacuum truck. This should typically be not more than 25 meters in linear distance and 4 meters in elevation gain. In case, the length and elevation is more than the specified, intermediate pumping may be required.
- (iv) Break the mortar seal of the septic tank lid. Inspect the tank for cracks or damage before and after the emptying of tank.
- (v) Lay out and connect the hoses from the truck to the tank or pit to be emptied and secure the truck using wheel chocks.
- (vi) It is essential to ensure that the hose is in sound condition and that the hose connections are locked into place, prior to using this method.

- (vii) Follow the safety instructions as prescribed in above section of mechanical cleaning of sewers.
- (viii) Open the tank or pit by removing the access ports or covers over the storage system.
- (ix) Engage the vacuum equipment by using a power take-off from the truck's transmission.
 - (x) Increase the vacuum to the proper level with the valve closed by watching the vacuum gauge, then lowering the end of the hose into the septic tank, and open the valve sufficiently, so that the faecal sludge is drawn out of the tank or pit.
- (xi) Breakup the faecal sludge that has agglomerated into a solid mass, either by making use of a long handle shovel or adding water when necessary.
- (xii) Operators shall leave behind sludge not less than 25 mm in depth in the bottom of the septic tank, as this will act as the seeding material.
- (xiii) Identify any abnormal condition, such as high concentration of non-biodegradable materials, oils and grease before taking to the treatment plant for final disposal.
- (xiv) If the cover of the tank has been removed, it should be replaced and sealed with cement plaster. If de-sludging has been carried out through a desludging hatch, the cover of the hatch should be replaced and sealed with cement plaster.
- (xv) Clean up any spillage using proper sorbent materials. The top of the cover and the area around the septic tank is sprayed with 1% hypo chlorite solution.
- (xvi) Two sets of working clothes will be provided for each worker, which should be dedicated to be used only during the de-sludging process. Clothes worn during the de- sludging process should be removed before the workers return home.
- (xvii) Prepare a written report indicating, how much waste removed; the condition of the tank or pit; any recommendations for repairs or maintenance, any recommendations for proper use of the system.
- (xviii) Inform the client that the work is complete, and give them the final report along with recommendations, if any.
- (xix) The final report shall also be entered in the computer in the ULB so as to provide a database and to also know about the next emptying date, etc.
- (xx) Remove the wheel chocks and drive the truck to the next site or to the nearest approved disposal site.
- (xxi) Necessary format of undertaking to be obtained from the contractor who engaged workers on outsourcing for cleaning and maintenance of sewerage system (including septic tank) through Memorandum of Understanding.
- (xxii) If in case, cleaning and maintenance of system is outsourced through a service contract, necessary conditions to be included in the bid documents, as well as in the contract agreement with contractor.

(5) Emergency preparedness:

- (a) Emergency plan to execute the work shall be prepared before arriving at the site.
- (b) The Supervisor and all the crew members involved in sewer cleaning should be familiarized with the emergency plan.
- (c) A tripod attached with rope & pulley and harness or some other suitable system shall be put in place for retrieving the injured worker.
- (d) A first aid kit distinctly marked with a red cross on white back ground shall be readily available at the site which should at least have the items listed in Annexure – II
- (e) Wash –up material like soap and skin cream for applying on the body shall be adequately available at the site.
- (f) A list of medical care centres available near the site may be prepared and made readily available.
- (g) Vehicle, preferably, an ambulance shall be available at the site for carrying the injured worker(s) to the hospital, in case of any emergency.

(6) Gas emergencies:

- (a) If a gas emergency occurs everyone should immediately put on their escape sets (breathing apparatus) and raise the alarm.

- (b) The men at the ground level are trained rescuers and they shall immediately send down the rescue sets and await the men working in sewer to come out. The men at the ground level shall attempt to rescue the men inside sewer with all the equipments at their disposal.
- (c) If there is a casualty, he should be propped up out of sewage in a comfortable position. Immediately call the emergency services like ambulance, fire brigade. When the victim has the gas mask on the face and if he is breathing, a rescuer should always be with him because he may vomit thereby choking the supply of oxygen.
- (d) First-aid shall be given to a gas victim, as given below:
- (i) Remove him to fresh air as soon as possible.
 - (ii) Apply artificial respiration with oxygen resuscitation if he is not breathing. If one is not available, apply mouth to mouth breathing.
 - (iii) Keep him lying down and wait for an ambulance.

(7) Precautions:

(a) Precautions against Gas Hazards:

When a sewer or a machinehole is required to be entered for cleaning or clearing an obstruction, where dangerous gas or oxygen deficiencies may be present, the following precautions shall be taken, namely:-

- (i) smoking, open flames and spark shall not be allowed.
- (ii) erect warning signs.
- (iii) use only safety gas-proof electric – lighting equipment or mirror for reflection of light.
- (iv) test the atmosphere for noxious gases and oxygen deficiencies. In case of scum formation, the sewage and sediments in the machine hole should be agitated with the help of rod or any other suitable instrument for trapped gases and the machine hole should be checked for noxious gases and oxygen deficiencies.
- (v) If the atmosphere is normal, workmen may enter with a safety belt attached and with at least two men available at the ground level. For extended jobs, the gas tests shall be repeated every three minutes while men are in the sewer.
- (vi) If oxygen deficiency or noxious gas is found, the structure shall be ventilated with pure air by keeping open at least one machine hole cover each on upstream and downstream side for quick exit of toxic gases or by forced ventilation using a portable blower. The gas tests shall be repeated before entering. Adequate ventilation shall be maintained during the work and the gas test shall be repeated every three minutes.
- (vii) If the gas or oxygen deficiency is present and it is not practicable to ventilate adequately before workers enter, hose masks shall be worn and extreme care shall be taken to avoid all sources of ignition. Workers shall be taught how to use the hose equipment. In these cases, they shall always use permissible safety lights (not ordinary flash lights) rubber boots or non-sparking shoes and non-sparking tools.
- (viii) Workmen descending a machine hole shaft to inspect or clean sewers shall try each ladder step or rung carefully before putting the full weight on it to guard against insecure fastening due to corrosion of the rung at the machine hole wall. When work is going on in deep sewers, at least two men shall be available for lifting workers from the machine hole in the event of serious/grievous injury.
- (ix) Portable air blowers for ventilating machine hole are recommended for all tank, pit or machine hole work where there is a possibility of presence of noxious gas, vapours or oxygen deficiency. The motor of these air blowers shall be of weatherproof and flameproof type, compression-ignitions-diesel type (without sparking plug). These shall be placed not less than 2m away from the opening and on the leeward side protected from wind so that they will not serve as a source of ignition for any inflammable gas which may be present. Forced type ventilation should be provided by blower located at ground level with suitable flexible ducting to displace the air from the machine hole.

(b) Precautions against infection:

The personnel working in sewerage maintenance systems are prone to infections and hence the following precautions should be taken, namely:-

- (i) The workers should be educated about the hazards of waterborne diseases such as typhoid and cholera through sewage and tetanus through cuts and wounds. Cuts and grazes should be covered with waterproof plasters. Effective immunization of workers against diseases such as typhoid, cholera, tetanus, etc., should be done by vaccination.
- (ii) The importance of personal hygiene should be emphasized and the worker should be instructed to keep finger nails short and well-trimmed, wash hands with soap and hot water before taking food and to keep fingers out of nose, mouth and eyes, because the hands carry most infection.

(iii) Use of rubber gloves shall be insisted so that sewage or sludge does not come in direct contact with hand. Before starting work, skin likely to be exposed to sewage should be covered with barrier cream.

(iv) The worker should be provided with a complete change of work clothes to be worn during hours. Gum boots should also be provided for the workers.

(v) When the work is completed, thoroughly wash all contaminated parts of the body.

(c) Precautions to be taken while working near vehicular traffic:

(i) Workers (on foot) exposed to vehicular traffic must wear fluorescent flagging garments.

(ii) Workers shall not wear any type of headgear that can interfere with hearing back up alarms, warnings, etc.

(iii) When hazards to workers exist because of vehicular traffic, use traffic controls in conformance with the Local Transport Authority.

(iv) Additionally, controls such as detours, warning signs or barricades shall be used when necessary. Flagmen are required where these controls are ineffective.

(v) Wherever mobile equipment operation encroaches upon a public thoroughfare, a system of traffic controls must be used.

(8) Methods of Cleaning Sewers and Septic Tanks.—Mechanical means of cleaning sewers is most preferred method and shall be employed wherever possible. Manual entry into the sewers shall be avoided as far as possible and shall be employed only in inevitable cases, that too with proper protective gears and other cleaning devices and ensuring observance of safety precautions. In no case, hazardous cleaning of sewers shall be entertained by the Urban Local Bodies or by private contractors under the Act, which completely ban hazardous cleaning of sewers. Most often, de-silting machines and jetting / suction machines are employed by larger Urban Local Bodies in the country for cleaning their sewers. Various sewer cleaning methods described in the Central Public Health Environmental Engineering Organisation (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013 shall be adopted, as follows:-

1) Manual Methods:

(a) Manila Rope and Cloth Ball.—The most common way of cleaning small diameter sewers up to 300 mm diameter is by the use of a manila rope and cloth ball. Flexible bamboo strips tied together are inserted in the sewer line by a person on top. If necessary, another person inside the machine hole with full safety gears, precautionary measures and safety equipment help in pushing the rod through the sewer line. When the front end of the bamboo strip reaches the next machine hole, a thick manila rope, with cloth ball at one end, is tied to the rear end of the bamboo splits. The bamboo splits are then pulled by another person in the downstream machine hole and pushed through the sewer line. As the rope is pulled, the ball sweeps the sewer line and the accumulated grit is carried to the next machine hole where it is removed out by means of buckets. This operation is repeated between the next machine holes until the stretch of sewer line is cleaned. This action requires careful supervision.

(b) Sectional Sewer Rods.—These rods are used for cleaning small sewers. The sewer rods may be of bamboo or teak wood or light metal usually about one-meter-long at the end of which is a coupling, which remains intact in the sewer but can be easily disjuncted in the machine hole. Sections of the rods are pushed down the sewer. The front or the advancing end of the sewer rod is generally fitted with a brush, a rubber ring for cleaning or a cutting edge to cut and dislodge the obstructions. These rods are also useful to locate the obstruction from either machine hole in case a particular portion of the sewer has to be exposed for attending to the problem.

(c) Scraper.— The scraper is an assembly of wooden planks of slightly smaller size than the sewer to be cleaned. The scraper chains, attached to a control chain in the machine hole into which it is lowered, are then connected to a winch in the next downstream machine hole by means of chains. The winch is then operated to push the debris ahead of the scraper. The upward flow behind the scraper and the water dropping from the top of the scraper will also assist in pushing it in the forward direction. This ensures that the bottom and the sides of the sewer are cleaned thoroughly. The scraped debris is removed manually.

2) Mechanical Methods:

(a) Sewer Cleaning Bucket Machine.—The bucket machine consists of two powered winches with cables in between. For cleaning a section of sewer, the winches are centered over two adjacent machine holes. To get the cable from one winch to the other, it is necessary to thread the cable through the sewer line by means of sewer rods or flexible split-bamboo rods. The cable from the drum of each winch is fastened to the barrel on each end of an expansion sewer bucket fitted with closing

device, so that the bucket can be pulled in either direction by the machine on the appropriate end. The bucket is pulled into the loosened material to clean the sewer.

(b) Rodding Machine with Flexible Sewer Rods.— This consists of a machine, which rotates a flexible rod to which is attached a cleaning tool such as auger, corkscrew or hedgehog and sand cups. The flexible rod is guided through the machine hole by a bent pipe. The machine propels the rod with the tool attached to one end, the other end being fixed to the machine. The rod is pulled in and out in quick succession when the tool is engaging the obstruction, so as to dislodge or loosen it. When the obstruction is cleared, the rod is pulled out by means of clamps keeping the rod propelled to facilitate quick and easy removal.

(c) Hydraulically Propelled Devices.— The hydraulically propelled devices take advantage of the force of impounded water to effectively clear sewers. The efficiency depends on the hydraulic principle that an increase in velocity in a moving stream is accompanied by a greatly increased ability to move entrained material. The transporting capacity of water varies as the sixth power of its velocity. The common hydraulically propelled devices are as follows:-

- (i) Flush Bags;
- (ii) Sewer Balls;
- (iii) Sewer Scooters.

(d) Velocity Cleaners (Jetting Machines) .— The high velocity sewer-cleaner makes use of high velocity water-jets to remove and dislodge obstructions. It combines the functions of a rodding machine and gully emptier machine. It includes a high-pressure hydraulic pump capable of delivering water at variable pressure up to about 8 MPa through a flexible hose to a sewer cleaning nozzle. The nozzle has one forward facing jet and a number of peripheral rearward facing jets. The high-pressure water coming out of the holes with a high velocity, breaks up, dislodges the obstructions and flushes the materials down the sewer. Moreover, by varying the pressure suitably, the nozzle itself acts as a jack-hammer and breaks up stubborn obstructions. A separate suction pump or airflow device may also be used to suck the dislodged material. The entire equipment is usually mounted on a heavy truck chassis with either a separate prime mover or a power take off for the suction device. The truck carries secondary treated sewage, if available, and if not, untreated fresh water for the hydraulic jet. The truck also has a tank for the removed sludge and various controls grouped together for easy operation during sewer cleaning. Now-a-days, mini jetting machines are also available in the market which can travel into narrow lanes and clean the sewer lines up to a length of 200 feet (60 meters).

(e) Dredger (Clam-shell) for machine hole cleaning.- It consists of a grab bucket on a wire rope, which is lowered into the machine hole in an open condition with the help of a crane and pulley. On reaching the bottom of the machine hole, the segments are closed, and the accumulated silt is picked up. The bucket can be closed by wire ropes or by a pneumatically operated cylinder.

(f) Gully Emptier (Suction Units).— Suction units create the vacuum required for siphoning of mud, slurry, grit and other materials. The vacuum elevated is such as to siphon the materials from the deep machine holes catch-pits etc, having depth ranging from 1m to 8m in normal cases with an option to suck an additional 4m with the help of special accessories for the purpose. The unit can be vehicle or trolley mounted. Silt and heavy particles settled at the bottom can be agitated and loosened by pressurized air with the help of the pump and then sucked into a tank.

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